

workshop report

implementing  
global maternal and  
neonatal health  
standards of care

JHPIEGO, an affiliate of Johns Hopkins University, is a nonprofit corporation working to improve the health of women and families throughout the world.

JHPIEGO Corporation  
1615 Thames Street  
Suite 200  
Baltimore, Maryland 21231-3492, USA  
<http://www.jhpiego.org>

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*April 2001*

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# ABBREVIATIONS

CA	Cooperating Agency
CBOH	Central Board of Health (Zambia)
CDC	Centers for Disease Control and Prevention
CEDPA	Centre for Development and Population Activities
CEOC	Comprehensive essential obstetric care
COPE	Client-oriented, provider-efficient
DAU	Dissemination, adaptation and utilization
DFID	Department for International Development (United Kingdom)
EPI	Expanded Programme for Immunization
FHI	Family Health International
GNC	General Nursing Council (Zambia)
GTZ	German Technical/Development Assistance Organization
JHU/CCP	Johns Hopkins University Center for Communication Programs
MNH	Maternal and Neonatal Health
MOH	Ministry of Health
NGO	Nongovernmental organization
NRD-MNH	National Resource Document for Maternal and Neonatal Health (Indonesia)
PATH	Program for Applied Technology in Health
PHN	Population, Health and Nutrition
POGI	Indonesia Association of Obstetricians and Gynecologists
PVO	Private voluntary organization
SO	Strategic Objective
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
UTH	University Teaching Hospital (Zambia)
WHO	World Health Organization

# WORKSHOP ORGANIZERS

The **Maternal and Neonatal Health (MNH) Program** is the flagship initiative of the United States Agency for International Development's (USAID) Office of Health and Nutrition. The MNH Program is jointly implemented by JHPIEGO, Johns Hopkins University Center for Communication Programs (JHU/CCP), the Centre for Development and Population Activities (CEDPA) and the Program for Applied Technology in Health (PATH).

Founded in 1948, the **World Health Organization (WHO)** leads the world alliance for Health for All. A specialized agency of the United Nations with 191 Member States, WHO promotes technical cooperation for health among nations, carries out programs to control and eradicate disease, and strives to improve the quality of human life.

**JHPIEGO Corporation**, an affiliate of Johns Hopkins University, is a nonprofit corporation working to improve the health of women and families throughout the world. Through advocacy, education and performance improvement, JHPIEGO helps host-country policymakers, educators and trainers increase access and reduce barriers to high quality health services for all members of their society. JHPIEGO's work is carried out in an environment that recognizes individual contributions and encourages innovative and practical solutions to meet identified needs in low-resource settings.



# WORKSHOP SUMMARY

## Overview

On 13 and 14 September 2000, JHPIEGO/MNH sponsored a workshop in Baltimore, Maryland, to explore issues in implementing global maternal and neonatal health standards of care. Workshop participants included USAID program staff, individuals from 10 universities and institutions in developing countries and three universities in the US, and representatives from the following organizations: Academy for Educational Development, American College of Nurse-Midwives, BASICS, CEDPA, Centers for Disease Control and Prevention (CDC), Family Health International (FHI), The Futures Group International, International Confederation of Midwives, INTRAH, JHPIEGO, JHU/CCP, PATH, Save the Children, United Nations Children's Fund (UNICEF) and WHO. (See **Appendix A** for a complete list of workshop participants and **Appendix B** for the workshop agenda.)

The overall goal of the workshop was to finalize a strategy for promoting evidence-based maternal and neonatal health standards globally. The workshop had three objectives:

- To highlight important changes in standards of care that affect maternal and neonatal survival.
- To develop programmatic recommendations for policy, service delivery, training, communication, and monitoring and evaluation interventions necessary for translating the content of maternal and neonatal health standards of care into practice.
- To reach a consensus on a strategy that addresses programmatic and technical issues for effective implementation of global maternal and neonatal standards of care.

In addition, WHO and MNH Program staff, as well as invited experts, identified program needs for disseminating, adapting and implementing these standards. The workshop also provided an opportunity for participants to further explore the linkages between use of standards of care and policy issues, education and training interventions, quality assurance activities at the healthcare delivery site (including performance improvement components) and behavior change interventions.

## Organization of the Workshop

To open the workshop, Joy Riggs-Perla, Director of USAID's Office of Health and Nutrition, described the Agency's vision for maternal and neonatal health and the importance of partnerships in reducing maternal

and neonatal mortality (see **Keynote Address**, page 5). Subsequent presentations by other participants centered on international resource materials; WHO's dissemination, adaptation and utilization (DAU) process; country studies from Nepal, Uganda and Indonesia; the PROQUALI model for performance and quality improvement in Brazil; and the importance of standards of care. On the second day of the workshop, participants divided into five working groups to discuss and refine a strategy for promoting maternal and neonatal health standards globally. The content of these working group discussions, as well as that of the preceding presentations, was incorporated into a revised strategy for disseminating and using guidelines (see **Strategy Paper**, page 11).

# **KEYNOTE ADDRESS**

## **NECESSITY OF COLLABORATION AND POOLING RESOURCES TO ENSURE QUALITY MATERNAL AND NEONATAL HEALTHCARE**

**Joy Riggs-Perla**  
**Director, Office of Health and Nutrition**  
**United States Agency for International Development**

Thanks to the organizers. Greetings to the audience.

It is a pleasure to have this opportunity to address the Board of Trustees and to share with you some thoughts about USAID's vision for maternal and neonatal health and the importance we place on partnerships.

The title of this talk says it all—no donor agency nor Cooperating Agency (CA), acting alone, can do it all. Even when we have a focused, strategic vision and clearly articulated interventions within our manageable interests, forging partnerships with other Cooperating Agencies, donors, and even across the various departments of one's own agency, is critical for safe motherhood—especially if we ever hope to reduce maternal and neonatal mortality.

USAID has five Strategic Objectives (SOs):

SO1: Unintended and mistimed pregnancies reduced.

SO2: Deaths, nutrition insecurity and adverse health outcomes to women as a result of pregnancy and childbirth reduced.

SO3: Infant and child health and nutrition improved, and infant and child mortality reduced.

SO4: HIV transmission and the impact of the HIV/AIDS pandemic in developing countries reduced.

SO5: The threat of infectious diseases of major public health importance reduced.

The MNH Program, supported by the Office of Health and Nutrition, should have direct impact on at least two of them: SO2 and SO3—reduction of deaths, nutrition insecurity and adverse health outcomes for women, children and infants.

Arguably, MNH programming could overlap with all five Strategic Objectives. For example:

- Reducing unintended and mistimed pregnancies, thereby reducing unsafe abortion and increasing birth intervals, is an important component in any overall strategy for improving maternal and newborn health and reducing mortality.
- STD screening and treatment in antenatal care is a key intervention to reduce perinatal mortality and reduces the risk for the mother of HIV infection.
- Bednets and intermittent presumptive treatment with anti-malarials reduce low birthweight and perinatal mortality. Parenthetically, I should mention that we recognize that the majority of infant deaths now occur in the neonatal period, and of those neonatal deaths, the vast majority occur in the first week following birth. These deaths are directly associated with the health of the mother during pregnancy and with events surrounding birth.

Thus we see the **potential** for maternal health programming to have a significant impact across all Agency Strategic Objectives. Indeed, we have to recognize that maternal health and safe motherhood programming is fundamental to achieving results across Strategic Objectives and to reducing maternal and infant mortality.

Under the Global Bureau/PHN (Population, Health and Nutrition) Strategic Objective 2, the results we want to obtain focus on four areas:

- integration of nutrition into maternal health programming;
- birth preparedness, including antenatal care, behavior change interventions to promote health seeking and healthy behavior, and community mobilization components;
- services for normal delivery; and
- management of complications of pregnancy, birth, the postpartum period and the newborn.

Obviously, to achieve results in all four areas, and ultimately affect health status, requires work at all levels of healthcare systems from the community to the national level.

Programming for safe motherhood is not vertical. It requires attention to nutrition, human resources development, commodities and logistics, development of service delivery and referral systems, policy development, advocacy, and social mobilization and communications. One-off projects or a shotgun approach to programming won't get us where we want to be.

It also requires that we think seriously about scaling up. This demands that we focus investments on those things that the system can sustain over time.

Moreover, programming for systems is limited to those things USAID has deemed within its manageable interests. For example, global programs can provide technical assistance but cannot renovate facilities or purchase pharmaceuticals and equipment needed to save women's lives.

Obviously it requires partnership between MNH, the missions and the Global Bureau. Even though a flagship program like MNH has a broad mandate, it has to complement, and not duplicate, ongoing activities in countries where it works. It has to respond to mission and host-country government priorities, and find the fit between those and its global mandate. USAID is a very decentralized agency. We can formulate a strategy at global level but it is carried out in the field.

Just in terms of the results we hope to achieve, we encounter the need for partnerships in countries among all agencies concerned and involved with the health of women, children and families. Not just for the purpose of coordination, but to ensure population impact.

- First, maternal health and nutrition interventions, while important in their own right, are integrally linked with child survival. Developing the links, wherever possible, with child survival programs is crucial for the success of safe motherhood programming. For example, safe motherhood programs can link with:
  - EPI (WHO's Expanded Programme for Immunization) activities to ensure that pregnant women receive tetanus toxoid
  - nutrition programs to ensure pregnant women receive micronutrient support during pregnancy and the postpartum period and which support women to breastfeed
  - Malaria programs and programs that offer HIV voluntary counseling and testing in pregnancy

To implement these program components, partnerships are needed—among USAID Cooperating Agencies as well as between CAs and other agencies such as CDC, UNICEF and nongovernmental organizations (NGOs).

- Second, safe motherhood programs need to do what they can to ensure that women have access to family planning. Not only will this potentiate the impact of safe motherhood programs—this can

improve contraceptive prevalence rates since postpartum women are an underserved group.

- Likewise, postabortion care should be seen within the context of essential obstetrical care and not as a stand-alone maternal health intervention. Forming these kinds of alliances can lead to joint planning and programming that has the potential to advance to scale programs with population impact.

Examples of how partnerships are working:

- **Burkina Faso**  
The MNH Program in Burkina Faso is a concrete example of how such partnerships are constructed. The Burkina Faso program works at each level of the healthcare system. In the community, MNH works with the NGO Plan International to deliver a birth preparedness package that includes mobilizing communities to overcome barriers to care. MNH provides technical assistance in human resource development to ensure that health providers are able to manage normal and complicated deliveries, while UNICEF provides clinics with needed equipment and pharmaceuticals. MNH works with CDC to provide technical assistance in integrating intermittent presumptive treatment into health services and also at community level for women who are unable to access services. And MNH works with the government of Burkina Faso and with other governments in the region to develop national curricula for health providers and national standards and guidelines for safe motherhood services. Through this approach, MNH is able to build a coalition of partners on the ground to improve maternal and newborn services and policies and also to address the problem of service underutilization.
- **Nepal**  
A similar partnership has evolved in Nepal. Here MNH is providing technical assistance to develop a training curriculum for front-line health providers at village level. UNFPA (United Nations Population Fund) has committed funds to implement this training and scale it up. The British Department for International Development is helping to upgrade health facilities, and MNH is working on strategies for community mobilization to encourage women to seek care. MNH is also conducting operations research in community financing to work out options to eliminate this important barrier to care. MNH is also building on ongoing investments in postabortion care and family planning programs.

Beyond the technical and programmatic reasons for partnerships, we need to recognize that safe motherhood programs need ongoing commitment. All of us working in development understand that

governments and international agencies like to demonstrate to the public that they are responding to emerging issues and have the capacity to tackle problems the Congress and constituencies feel are the most pressing priorities. One year that may be reproductive health—the next, infectious diseases—the next, HIV/AIDS. All of these issues may be on **our** radar screen and we may be moving ahead with programs and strategic plans. However, the priority placed on each issue and consequently the funding levels for these programs will shift.

It does not necessarily mean that the total amount from the public purse to spend on international development will be greater than in previous years. Soft earmarks reduce the amount of discretionary funds available to missions and the global and regional bureaus in Washington. This forces Strategic Objective teams to look for ways to absorb earmarked funds within existing programs in order to “stay the course.”

CAs, in turn, will find themselves under pressure to design programs that address several Strategic Objectives simultaneously. It also increases reporting responsibilities and requires CAs and USAID staff to partner with disparate players in order to bring in the expertise needed to carry out programs and to piece together the necessary resources to design a program that has a chance of obtaining results.

I cannot emphasize how important it will be in the coming years to speak with one voice on this issue. Existing partnerships between USAID, its Cooperating Agencies and the international community need to be strengthened in ways that will enable safe motherhood programs to continue to make progress. That will include reaching out to other potential partners who can support these efforts. It will include mobilizing communities worldwide through the White Ribbon Alliance to recognize that they can have a voice and take action collectively to find ways to overcome the barriers keeping women from services and services from functioning effectively. And it will include getting results—all of us have a responsibility to demonstrate that safe motherhood isn't an unattainable dream but that, together, it is possible to make a difference.

Thank you.



strategy paper

implementing  
global standards of  
maternal and neonatal healthcare  
at healthcare provider level

A strategy for disseminating  
and using guidelines

Robert H. Johnson, MD, MPH

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Editors: Kathleen Hines  
Dana Lewison

The author would like to thank his colleagues who participated in the September 2000 Workshop “Implementing Global Maternal and Neonatal Health Standards of Care.” Their insights helped refine an earlier draft of the strategy. Thanks also to the staff of the MNH Program, who provided valuable contributions to this paper.

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## **EXECUTIVE SUMMARY**

To address the problems of maternal and neonatal health in developing countries, a standard of care is required to define level of performance, improve quality of services provided and, ultimately, reduce maternal and newborn deaths. The standard of care should be based on state-of-the-art scientific information and focus on the woman and her baby in the context of her family and community. A country's standards are embodied in its policy and service delivery guidelines.

The policy guidelines document is the more general one that provides the basic outline for the provision of services, while the service delivery guidelines contain the detailed, technical information that healthcare providers need to implement the national policy guidelines as they provide patient care. Countries can use international resource materials, such as those developed by WHO and JHPIEGO, as the basis for their national policy documents, and can also adapt them to create country-specific service delivery guidelines that are clinically sound and up-to-date.

Development and implementation of national guidelines is a complex process involving many levels of the healthcare system. Essential activities that have to occur at the national, regional and/or district levels in order to implement guidelines at the healthcare provider level usually include a number of steps:

- identifying stakeholders and gaining consensus on the need for change;
- forming a national advisory group;
- developing and revising draft national policy guidelines;
- developing and revising draft national service delivery guidelines;
- validating draft documents through review by key stakeholders external to the advisory group;
- endorsing officially the policy document and service delivery guidelines;
- disseminating policies and guidelines at the national level;
- disseminating policies and guidelines to the regional and district levels;
- ensuring that systems are in place to support quality provision of care;
- motivating providers and ensuring that they have skills; and
- ensuring involvement of the community.

For national policies and guidelines to have impact at the level of healthcare provision, effective systems for human resources, training, supervision, supplies, logistics, drugs and equipment, referral, and monitoring and evaluation must be in place. These systems both support and are supported by implementation of the guidelines, and help to ensure provision of the high quality of care embodied in the national standards. Ultimately, community members must perceive these standards as their right, and then mobilize to bring about their full and effective implementation because, in the final analysis, the standards are implemented for the benefit of women, their newborns and their communities.

## **PREFACE**

This strategy paper builds on the DAU process defined and described by WHO for implementation of technical guidance materials by international agencies and programs. It offers numerous practical recommendations for implementation of guidelines at the country and healthcare provider level.

As described in this paper, the process of implementing service delivery guidelines at the level of healthcare providers starts with the development or refinement of guidelines in a particular country. International resource materials developed by international technical assistance organizations such as WHO, UNICEF and USAID's agencies and contractors (e.g., BASICS, JHPIEGO, Save the Children) serve as sources of information on best practices and evidence basis, and may even provide a prototype upon which national guidelines can be based. These international materials support the development of national guidelines, but for the purpose of this paper, the development and distribution of international resource materials themselves are not considered part of the process of developing and implementing national guidelines.

It is a common error to think of guidelines implementation as a linear process starting with the development of global prototypical documents and ending with their ultimate implementation by a country's healthcare providers. In fact, international resource materials serve only as models or inspiration for decision-makers and planners in a country seeking to reduce maternal and neonatal deaths. National authorities, working with their collaborators, take from those materials up-to-date information on best practices, standards of care and the evidence for those standards and practices, and then build unique national policy documents and service delivery guidelines. Even if the final national documents strongly resemble the international resource materials, they are still two entirely different entities. The national team finishes with the international resources and puts them aside. The active, living documents are the country's own, and it is these that are nationally implemented. This strategy paper describes the process of guidelines implementation from this point of view.

# INTRODUCTION

Reduction of maternal and neonatal mortality continues to be one of the greatest challenges to human development. During the last decade, projects to reduce maternal and neonatal mortality have focused on various interventions, including the risk approach, training of traditional birth attendants and improved maternal nutrition—without achieving the anticipated improvements.

Although the problem of reducing maternal and neonatal mortality is complex, the 1997 Safe Motherhood Technical Consultation in Sri Lanka concluded that the single most critical intervention in safe motherhood is the presence of a skilled birth attendant<sup>1</sup> at labor and childbirth, with transport to emergency obstetric care available in case of emergency.<sup>2</sup>

How can we ensure that providers are competent to provide maternal and neonatal healthcare? In the health field, as in many other professions, the foundation of high quality services is the use of standards. Standards of care inform healthcare providers about what is expected of them and what they should do to deliver high quality services at each level of the healthcare system. They specify the continuum of care that is necessary to improve maternal and neonatal outcomes. Standards promote quality care, delivered in the most appropriate way, by the most appropriate personnel. The likelihood of ensuring high quality care is increased when skilled attendants perform their jobs competently and their competence is verified by comparing their performance to evidence-based standards of care. Furthermore, standards can empower women and communities, giving them a tool to advocate for improved healthcare.

This document examines the critical pathways to implementing national service delivery guidelines at the healthcare provider level. These guidelines will have been developed in harmony with national policies, which in turn, have been revised in accordance with global standards using international, evidence-based resource material. This paper provides guidance to ministries of health and the agencies that support them in their efforts to improve the quality of care in their countries.

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<sup>1</sup> Skilled birth attendants are defined as “People with midwifery skills (e.g., doctors, midwives and nurses) who have been trained to proficiency in the skills to manage normal deliveries, [as well as] diagnose and manage or refer complicated cases.” *MotherCare Policy Brief 3*, May 2000.

<sup>2</sup> MotherCare. 2000. *Policy Brief 3. Improving Provider Performance: The Skilled Birth Attendant*. Summary of a MotherCare Meeting, 2–4 May 2000.

# STANDARDS AND GUIDELINES

The words “standard” and “guideline” are each defined in many different ways and sometimes are even used interchangeably. This paper seeks to use the most generally accepted definitions of the terms.

## Standards

WHO defines a standard as an agreed-upon level of performance that specifies what action should be taken. It serves as a benchmark upon which to make judgments. It must be achievable, observable, desirable and measurable. Standards of care for maternal and neonatal health should be evidence-based (supported by current scientific knowledge) and focus on the woman and her baby in the context of her family and community.

Standards of care are the basis for:

- education and training curricula (pre- and inservice)
- content for training manuals, clinical care protocols and guidelines
- identification of gaps in technical or organizational performance for quality programs
- supervisory and management systems
- essential equipment, supplies and drug lists
- job descriptions and deployment of personnel
- essential level of care and referral criteria
- measurable outcomes

Standards allow provider training and performance to be consistent at all levels of the healthcare system and provide the means to ensure uniformity of the healthcare delivery practices needed to support quality clinical services. However, standards can be implemented consistently in a country only if there is an effective and efficient healthcare delivery system in place. Components of the system should link into a continuum of care that has well-defined responsibilities at each level and the necessary infrastructure to support these services. Standards help to identify deficiencies in the system.

## Guidelines

The word “guidelines” is a generic term for various documents that describe how standards are achieved. Two broad types of guidelines exist at the national level: policy guidelines and service delivery guidelines. Policy guidelines for maternal and neonatal healthcare are the government’s official statement about standards for maternal and neonatal health services; they can be considered a management tool for achieving standards. In addition to being evidence-based, they reflect

individual client demands, the community's perceived needs and the overall healthcare situation in the country. Policy guidelines describe:

- which services are to be officially offered;
- who may receive these services (e.g., any income restrictions);
- who will deliver the services (i.e., categories of healthcare providers);
- where these services will be delivered (i.e., at what level of the healthcare system);
- how often certain services are to be delivered (e.g., how many antenatal care visits); and
- what the minimal acceptable level of performance is for each service offered.

Policy guidelines do not contain the technical information needed to provide services; rather, they serve as a general outline for the provision of services.

Service delivery guidelines are a technical tool for achieving standards, and they provide the detailed information needed to implement the national policy guidelines. They are used by healthcare workers throughout the system as the source of specific, up-to-date information about the maternal and neonatal health services offered in a country, as well as general information needed by healthcare workers to provide high quality maternal and neonatal health services. Service delivery guidelines complement policy guidelines by:

- describing the components of maternal and neonatal health services, including protocols on how to perform those services;
- introducing related components needed for quality service provision, such as the principles and procedures for infection prevention practices;
- explaining how healthcare providers should relate with mothers-to-be, new mothers and their babies;
- recommending how maternal and neonatal services should be organized at the various levels of the country's healthcare system; and
- serving as the basis for maternal and neonatal health learning and resource materials, the maternal and neonatal component of curricula for preservice education and evaluation systems for training and healthcare delivery.

In some countries, service delivery guidelines comprise several different documents, such as a service standards document, a document on

service protocols and procedures, and a service plan. For the purpose of this paper, all these documents will be considered in the category of service delivery guidelines.

## **International Resource Materials**

Well-developed international resource materials bring together global lessons learned, international evidence and diverse perspectives, and serve as a “one-stop-shop” for collective global experience from which individual countries can benefit. Use of these materials by national ministries of health helps ensure that countries have state-of-the-art information upon which to base their standards and guidelines. Materials containing international standards based on evidence and best practices contribute substantially to national policy documents. More specifically, materials that have been formulated as prototypic manuals or guidelines can be adapted easily to become national service delivery guidelines. WHO and JHPIEGO, working both independently and in collaboration with each other, have developed a considerable body of evidence-based material that sets global standards and defines appropriate protocols and procedures for maternal and neonatal healthcare for even the lowest-resource settings. These materials can be readily adapted to most country situations.

**Table 1** describes the four WHO and JHPIEGO technical manuals that form an essential maternal and neonatal healthcare package.

These manuals provide the evidence-based technical guidance for justifying best practices and, together, can be used as the basis for clinical care standards in countries around the world. Their content can be adapted within the framework of the needs, resources and priorities of specific countries to contribute to the development of national policies and service delivery guidelines.

**Table 1. Components of the Essential Maternal and Neonatal Healthcare Package**

<b>MANUAL</b>	<b>INTENDED AUDIENCE</b>	<b>FOCUS</b>
<i>Essential Care Practice Guidelines</i> (WHO)	Healthcare personnel at all levels who provide maternal and neonatal healthcare	Basic care during normal pregnancy, labor and childbirth; early identification of complications and pre-referral treatment
<i>Basic Maternal and Newborn Care</i> (JHPIEGO with substantial contributions by BASICS, American College of Nurse-Midwives)	Midwives, nurses and other healthcare professionals who provide maternal and neonatal healthcare	Refocused antenatal care; early detection of complications; normal labor and childbirth; and normal postpartum care, including care of the newborn
<i>Managing Complications in Pregnancy and Childbirth</i> (WHO and JHPIEGO)	Doctors and midwives at institutions offering comprehensive essential obstetric care (CEOC)	Diagnosis and treatment of complications of pregnancy, childbirth and the immediate postpartum period, including immediate problems of the newborn
<i>Care of the Sick or Low Birth Weight Newborn</i> (WHO and JHPIEGO with BASICS)	Doctors, midwives and nurses at institutions offering CEOC	Diagnosis and treatment of principal newborn problems, including low birth weight

By working with and adapting global documents such as those described above, national ministries of health can efficiently and rapidly produce materials and resources specific to their needs while ensuring that their national materials are up-to-date and clinically sound.

## USING GUIDELINES TO IMPROVE STANDARDS OF CARE

The guidelines implementation process is a complex one that involves individuals at many levels of the healthcare system. There is no one approach that will work in all countries; instead, the process of guidelines development and implementation must be tailored to suit each country in which it is undertaken. For example, in some countries where the healthcare system is decentralized, the development process may take place at two levels, with policy guidelines set at the national level and service delivery guidelines developed at the state or district level. This paper will describe a guidelines development process that reflects the scenario common in many countries, but this should not be construed to be the only pattern by which guidelines come about.

### Developing Guidelines

In a logical framework, maternal and neonatal health policy would be set first and national service delivery guidelines would be developed based on that policy. In reality, service delivery guidelines are often developed first and then used to influence the national reproductive health policy. In countries with limited political commitment to safe motherhood, it may be effective to begin policy development by first building consensus among leaders in the healthcare community on the need to standardize the way services are provided and change the way clinical training is conducted. Although the following steps may not proceed in the sequence in which they are presented, nor even at the same level of the healthcare system, they are a set of activities that are essential for implementation of guidelines at healthcare provider level.

#### **Identify Stakeholders and Gain Consensus on Need for Change**

Implementing standards of care usually necessitates changes in national healthcare policy, for example, giving nurse-midwives prescriptive authority, placing critical maternal and neonatal drugs on the essential drug list and deciding whether the community should pay for maternal health services. To start this process, however, there must be political will to change. Political will requires that policymakers understand the issues, be motivated to change and have the resources and skills to effect and enforce change.

### **Several Zambian Health Agencies Take Preliminary Steps Toward Developing Guidelines**

The process of developing maternal health clinical guidelines in Zambia began with sensitizing key stakeholders. To start, the MNH Program was invited to update the skills of a group of midwifery faculty and clinicians, including obstetricians/gynecologists, who were identified to strengthen the midwifery curriculum. This team worked with the General Nursing Council (GNC) and the Department of Obstetrics and Gynecology at the University Teaching Hospital (UTH) to develop and implement a prototypical set of MNH protocols. Using these protocols, two practice sites in Lusaka, at UTH and a district clinic providing maternal health services, were strengthened, and the midwifery curriculum strengthening team (15 faculty and clinicians) was updated in key MNH skills. The team has now reviewed and suggested revisions to the registered midwifery curriculum based on the protocols and the expanded scope of practice defined in the Nurses and Midwives Act, which has been passed and will be put into action as soon as the commencement order is given.

Reproductive health staff at the Zambian Central Board of Health (CBOH), UTH's Department of Obstetrics and Gynecology, and the GNC have been sensitized to the need for developing clinical guidelines. Copies of *Managing Complications in Pregnancy and Childbirth* and the draft *Essential Maternal Health Care Clinical Guidelines and Protocols for Uganda* have been distributed to key decision-makers. As a result, CBOH has included the development of maternal health clinical guidelines in its action plan for 2001, and a preliminary timeline has been developed. Meanwhile, MNH staff continue to sensitize senior staff at CBOH. The MNH team in Zambia is working on finalizing the timeline, gaining agreement on the process and developing a guidelines technical working group.

Key to the policy process is the identification of stakeholders—nationally and locally. Stakeholders for safe motherhood are found in ministries of health, other relevant ministries (e.g., women's affairs, finance, education), health regulatory bodies (e.g., nursing councils), universities, NGOs, private voluntary organizations (PVOs), professional associations, women's groups, and donor and technical assistance agencies, among others. Representative stakeholders at regional, district and community levels are also identified and the issues they see as potential solutions or obstacles to the problems of safe motherhood are mapped out. This information is used to guide the development of strategies for policy change. Beside being a multisectoral group, stakeholders are also multidisciplinary: policymakers, healthcare providers, supervisors, managers, educators, private sector officials, community leaders and clients.

### **Nepal Stakeholders Identify Challenges to Implementation of Safe Motherhood Standards**

During the process of planning for implementation of Nepal's national guidelines, called *Reproductive Health Clinical Protocols*, stakeholders identified the following challenges that would have to be met if the protocols were to be implemented effectively:

- Policy challenges
  - pattern of frequent staff transfer
  - low staff morale
  - inconsistent posting of staff to rural areas
  - inadequate supervision and support for providers
  - inadequate logistics systems for supplies
- Donor challenges
  - need for improved coordination among donors
  - much collaboration driven by individual personalities
  - central office agendas of donor agencies that conflict with government goals
- Training challenges
  - healthcare providers with poor basic skills
  - training sites with low caseloads
  - extensive time required for training
- Low demand for services
  - lack of access to rural communities
  - differing perceptions among community members about pregnancy, childbirth and illness
  - caste, class and gender differences between healthcare providers and community members

As a result of this identification of challenges by the stakeholders, it was possible to develop strategies for overcoming obstacles before implementation even took place.

Once stakeholders are identified, information and advocacy efforts are made to ensure that these stakeholders are “on board.” If they are not motivated to make changes and do not feel a sense of ownership in the process, it is unlikely that significant change will occur. The means of generating this sense of ownership will take different forms in different countries—educational seminars, national symposia, technical update workshops, rallies, individual meetings, etc. One common need, regardless of the methodology, is for the stakeholders to have accurate, up-to-date, global information about the challenges of maternal and neonatal health and their solutions. They also must have evidence-based information on best practices in order to convince decision-makers of the need to change. These kinds of information are readily available from organizations such as WHO, JHPIEGO/MNH, etc. (see **Table 1**, above).

### **Form a National Advisory Group**

Ensuring that healthcare providers deliver maternal and neonatal healthcare according to the standards set out in service delivery guidelines is a challenge. It will take several years to accomplish and will require enthusiastic and continual support from numerous non-health sectors as well as the ministry of health. Countries that have tried to implement guidelines entirely through the efforts of the ministry of

health have generally had disappointing results. The greatest probability of success is tied to the establishment of a dynamic, multidisciplinary, multisectoral safe motherhood committee or advisory group. The form that this group takes, the authority that it has and its placement within or outside government vary from one country to another, but every country that has claimed success in driving down high levels of maternal and neonatal mortality has had some type of active, highly visible and highly placed safe motherhood committee.

This committee, or a sub-group of it, can spearhead the preparation of the policy documents and service delivery guidelines. If it has sufficient authority, it can co-opt appropriate leaders to contribute to the standards and guidelines, organize guidelines field-testing and revision, advocate for their ultimate approval and adoption, and encourage their implementation at regional and district levels.

This kind of group is extremely useful, if not essential, to the guidelines development and implementation process. It should be formed as soon as possible after the stakeholders have been identified and they have reached consensus on the need for change. At that time, enthusiasm is high and stakeholders are most willing to commit to this effort. Members are usually well known and highly respected persons in fields related to safe motherhood. They may be leaders of government, universities, healthcare institutions and local NGOs; the group may also include respected private individuals, among others. Their collective voice carries the necessary weight to move programs past the inevitable obstacles that arise.

Even after standards are achieved, it will be necessary to review practices as new information becomes available. The national advisory group should therefore be considered a permanent or semi-permanent advisory group. In some cases, the advisory group for guidelines implementation may be a subcommittee of the national safe motherhood committee.

**Develop/Revise  
Draft National  
Policy Guidelines**

Policies embodying national standards address the overarching maternal and neonatal health priorities and capacities of a country. National standards based on best practices must be accepted and introduced within a realistic framework of the country's needs, available resources and program priorities. Revision of national policy guidelines entails adapting best practices to suit those specific needs, resources and capacities. There is rarely just one best practice, but often a multitude of them, and it is up to the stakeholders to identify which ones best meet their needs and priorities.

National policy statements need to outline and support effective logistic, healthcare delivery, training and supervisory systems and monetary allocations to implement the service delivery guidelines and reach

nationally recognized standards of care. They may be developed or, more often, revised by a subgroup of the national advisory group or safe motherhood committee, or by another group of stakeholders.

As decentralization of health services and fee-for-service schemes become more prevalent, and as more community organizations participate in the management of health facilities, the group of stakeholders who draft or revise policy documents nowadays usually includes both representatives of healthcare providers and the communities to be served. This representation ensures that the policies developed reflect the healthcare priorities of both groups. Standards of care thus developed provide the community with the guidance needed to evaluate and promote these services.

To draft or revise national standards policy, stakeholders normally use internationally accepted resource materials and determine how these can best be applied in the context of their own country. This process sets an achievable level of quality within the possibilities and constraints of the country's situation (taking into consideration its needs, resources and priorities), while fostering a sense of ownership for the resulting documents by stakeholders at all levels.

Policy documents should highlight all aspects of maternal and neonatal health services (antenatal care, normal childbirth, treatment of emergencies, postpartum care, neonatal care, nutrition) and their linkages to other reproductive health services (e.g., postabortion care, family planning). They should include information on case management and set standards for the delivery and supervision of maternal and neonatal health services, community involvement, relationship with other reproductive health services, and required equipment and supplies. Policy documents, and the standards they set, become practical statements when they are used to develop or modify service delivery guidelines, supervision guides, training materials, drug and supply lists, and other tools that improve provider performance.

**Diverse Stakeholders in Guinea Revise, Validate Policy Guidelines After Situational Analysis**

In April 2000, the Ministry of Health (MOH)/Guinea requested that USAID provide technical assistance to revise the national safe motherhood document. USAID transmitted this request to the MNH Program, and in July 2000 the national safe motherhood revision team conducted a situational analysis of maternal health in Guinea. This analysis was based on findings from site visits by the team, joined by other healthcare providers experienced in assessment, to service delivery points in seven rural prefectures and four urban communes in the country's four geographic regions.

Immediately following the situational analysis, a workshop which used a participatory approach was held to redefine the strategic focus, objectives and activities of the safe motherhood program. The 30 workshop participants were a diverse group of stakeholders, including regional and prefectural health inspectors, healthcare providers from all levels of Guinea's decentralized healthcare system and representatives from local and international NGOs. The information from the revision workshop was then used to complete a draft revision of the safe motherhood program document (policy guidelines). In November 2000, the national revision team held a validation workshop for the document with the collaboration of the MNH Program to determine the final form of the document and develop a national safe motherhood action plan.

**Develop/Revise  
Draft National  
Service Delivery  
Guidelines**

The development of service delivery guidelines based on accepted, or soon-to-be-accepted, national standards can be a complicated process. Their successful development depends upon the national advisory body, or another designated group, which drives the revisions and adapts guidelines to their country's specific needs, resources and priorities. The drafting group, which comprises writers, reviewers and sometimes even a legal advisor, works from the international resource materials to generate unique guidelines appropriate to the country. Because of the technical nature of the guidelines, if the drafting group does not include experienced clinicians, these individuals are made available to it on a consultative basis.

Development of service delivery guidelines demands certain information about the healthcare services situation in the country. When this information is not readily available, a needs assessment is often performed to collect the missing pieces. A full-blown and expensive needs assessment is usually not necessary, but a carefully focused, small-scale needs assessment designed to fill in the gaps and find answers to critical questions can be extremely useful.

The process of guidelines development also will include larger group discussions for feedback, reality testing, approval and endorsement of their adoption. This larger group includes members of health professions, service organizations, donors, professional associations, educational institutions, community representatives and clients.

National service delivery guidelines translate international standards into appropriate, practical instructions for skilled providers. They furnish details about how and by whom services are to be managed and delivered. They generally include protocols for the performance of specific maternal and neonatal healthcare tasks, drug, equipment and

supply lists, and supporting measures such as infection prevention practices. Guidelines permit healthcare delivery, training, supervision, logistical support and management practices to be of consistently high quality at all levels of the healthcare system. They provide the means to standardize healthcare delivery practices needed to support quality clinical healthcare. Guidelines can only be implemented effectively, however, when policy supports them, necessary resources and infrastructure are present, effective healthcare delivery support systems are in place and both the community and providers feel ownership of them.

#### **Ugandan Service Delivery Guidelines to Be Used for Training and Service Delivery**

The process for developing the essential maternal and neonatal healthcare (service delivery) guidelines in Uganda involved a series of participatory activities with a group of over 30 leading Ugandan healthcare providers and decision-makers. These activities included maternal and neonatal health technical updates for key stakeholders, improved access to information on effective practices, drafting and review of individual sections of the proposed guidelines document, and meeting to present and critique the final draft versions that were produced. The result is a document, *Essential Maternal & Neonatal Care Clinical Guidelines for Uganda*, which focuses on improving maternal and neonatal survival through improvements in antenatal care, labor and delivery, postnatal care, management of abortion complications, postpartum contraception and infection prevention.

These service delivery guidelines provide basic maternal and neonatal healthcare standards for assisting providers in the decision-making process for services, and will be critical resource documents for training, quality improvement, information, education and communication initiatives and healthcare delivery programs. The participatory manner in which the guidelines were developed ensured not only that they reflect and respond to real needs and concerns, but also that they foster broad acceptance and implementation when used in maternal and neonatal health programs.

The *Essential Maternal & Neonatal Care Clinical Guidelines for Uganda*, which adapted essential content from the WHO resource document *Managing Complications in Pregnancy and Childbirth*, has been instrumental in shaping key policy and training documents such as the Minimum Package of Reproductive Health Services for Uganda, the Ob/Gyn Medical Internship package, and the preservice component of the midwifery curriculum on essential maternal and neonatal healthcare. The document has also been a model for similar efforts in other countries in the East and Southern Africa region that have expressed interest in adapting it for their own needs.

#### **Validate Draft Documents Through Review by Key Stakeholders External to the Advisory Group**

To achieve true national ownership, policy guidelines require a thorough review by the stakeholders and then by a larger group of interested parties external to the advisory group. Service delivery guidelines, because of their technical nature, require a more extensive review process. They are first field-tested by groups of providers at various levels and types of facilities and by different cadres of health services personnel. Often the draft guidelines have to be translated into supervisory checklists or training materials for field-testing. Feedback is obtained from the test sites and analyzed by the drafting committee. This feedback includes not only the reaction of the healthcare delivery system to the guidelines, but also the response of clients and the community. It leads to revision of the guidelines document in preparation for its final, official endorsement.

**Collaboration Among Agencies Ensures Successful Field-Testing and Validation of Guidelines in Nepal**

Through close collaboration of the government with a number of bilateral and international organizations, CAs and NGOs, service delivery guidelines for reproductive health were developed in Nepal. Agencies cooperating with the His Majesty's Government included USAID, UNFPA, the UK Department for International Development (DFID), the German Technical/Development Assistance Organization (GTZ) and WHO. These guidelines were then field-tested through the collaboration of two more agencies: Redd Barna and the United Missions to Nepal. Following the field-test, they underwent extensive revision and were shaped into seven volumes called *Reproductive Health Clinical Protocols*. The *Protocols* were designed to give all cadres of healthcare providers specific guidance on how to treat common occurrences and make clinical decisions.

Despite many challenges, the experience in Nepal demonstrated that collaboration among many organizations can be successful in developing, testing and disseminating guidelines that embody national standards of care.

**Endorse Officially the Policy Document and Service Delivery Guidelines**

Once reviewed and revised as needed, policy documents generally require full government approval. The pathways, individuals and government levels required for this approval vary widely from one country to another, but the need for official approval remains invariable if the standards are to be applied effectively and consistently to national healthcare provision.

**Implementing Guidelines**

**Disseminate Policies and Guidelines at National Level**

Dissemination of the guidelines at national level can begin by a variety of mechanisms. In many countries, dignitaries launch the new guidelines at a large, formal meeting attended by a diverse audience of politicians, healthcare professionals, consumers and the media. This event has the added benefit of increasing the public's awareness of the content, purpose and significance of the guidelines. Additionally, more targeted channels of communication are often used specifically to inform decision-makers, healthcare providers, women's health advocates, community groups, preservice educators, clinical trainers and supervisors about the guidelines.

**Indonesia Launches National Guidelines at Workshop Attended by over 100 Key Stakeholders**

At a workshop held on 1 July 2000 before the POGI (Indonesia Association of Obstetricians and Gynecologists) Congress in Bali, Indonesia officially launched its *National Resource Document for Maternal and Neonatal Health* (NRD-MNH). One hundred stakeholders, including Ob/Gyn specialists, teaching faculty from medical and midwifery schools and MOH representatives attended the meeting and were introduced to the NRD-MNH as the new, officially endorsed standard for maternal and neonatal healthcare.

The 600-page NRD-MNH, written in Bahasa Indonesia, contains sections on the principles of safe motherhood, care in normal pregnancy and childbirth, care of complications in pregnancy and childbirth, and detailed guidance for a broad range of obstetric and midwifery procedures. The NRD drew heavily from the WHO resource document *Managing Complications in Pregnancy and Childbirth*.

The NRD-MNH will be distributed to all medical and midwifery schools and reproductive health training programs in Indonesia, and to healthcare delivery sites throughout the country. A pocket-sized edition to be distributed to all healthcare providers is being produced.

Preservice education and inservice training materials, consistent with the NRD-MNH, have been developed and are already being used for care of normal pregnancy, childbirth, the postpartum period and the newborn.

**Disseminate Policies  
and Guidelines to  
Regional and  
District Levels**

Dissemination and promotion of the completed documents to regional and district levels are the next step in the implementation process. This does not happen just by sending the documents out; it requires strategic planning and the commitment of adequate human and financial resources at both national and peripheral levels. For this part of the process to be successful, the material must be distributed to, and understood by, all levels of critical users. At least one copy of the guidelines should be placed in each appropriate healthcare facility.

**Kenya Pioneers Successful Strategy for Dissemination of Reproductive Health, Malaria Guidelines**

The dissemination of the Kenyan *National Guidelines for Diagnosis, Treatment and Prevention of Malaria in Pregnancy* is based on the extremely successful dissemination of the Kenyan document *Reproductive Health/Family Planning Policy Guidelines and Standards for Service Providers*, recently evaluated by FHI. This dissemination strategy works within the decentralized training system to train providers to train others in the use of the guidelines. The strategy is implemented by use of an orientation package and job aid to train providers and prepare them to update fellow staff. These staff then use the same method to prepare their fellow staff members to use the guidelines, and so on. The strategy also provides for on-site supportive supervision. The method has had a positive impact on healthcare provider knowledge and practices, and has been endorsed by FHI as an excellent example of guidelines dissemination.

The *National Guidelines for Diagnosis, Treatment and Prevention of Malaria in Pregnancy* will be disseminated in the same way by JHPIEGO at the request of DFID. JHPIEGO has developed the orientation package and job aid, conducted a baseline test and facilitated “echo” orientations in two malaria endemic districts. JHPIEGO is also conducting supportive supervision and will evaluate the success of the venture.

The dissemination process works most effectively when a variety of appropriate strategies are implemented either together or sequentially to ensure both adequate distribution and understanding of the guidelines. The method used to disseminate these documents to different cadres of

healthcare providers and at different points in the healthcare delivery system varies according to the cadre and level of the system targeted. It may involve creative dissemination techniques such as radio dramas, workshops, fliers that highlight important aspects of the guidelines, the Internet, hotlines for questions and problem solving, audio cassettes for distance learning and updates, posters and logos promoting sites that use the guidelines, and modeling by respected colleagues. Other methods include incorporating the materials into workshops, training programs, service manuals, job aids, supervision and monitoring tools, and client materials.

The materials used for dissemination must be easily understood and readily accessible to the healthcare providers who will use them and, as appropriate, to the communities that will benefit from them. They should reflect what is written in the guidelines in a way that best resonates with the intended target audience. The method of dissemination will certainly vary according to the end user, but ensuring that 100 percent of intended users receive and understand the documents is key to the success of the guidelines.

#### **Honduras Implements Guidelines on Hypertensive Disorders at Two Hospitals by Use of Checklist**

In Honduras, two guidelines documents—one on norms for managing obstetric complications at the facility level and the other on norms and procedures for integrated care for women—were published in 1999. An assessment by the MNH Program at Hospital Mario Catarino Rivas and Hospital Escuela during the same year revealed high levels of maternal mortality and little adherence to the standards of care represented by the guidelines documents. In fact, the documents had not yet been disseminated widely and some key decision-makers had not participated in their development. Consequently, healthcare providers resisted using the guidelines as the basis for care provision.

The MNH Program began a project to operationalize the standards of care at the two hospitals, working closely with key influential personnel from the hospitals' obstetrics/gynecology departments. They developed a "verification list" for care for hypertensive disorders, the first standard to be addressed. This tool, which takes the form of a checklist, can be used for teaching healthcare providers how to manage patients with hypertension and for verifying that complete and appropriate care has been given to them. In effect, it serves as a service delivery guideline for a specific complication. A study is now underway at the two hospitals to determine whether implementation of the guidelines and utilization of the checklists make a difference in the quality of care provided for hypertensive disorders. If the results of the study show such a difference, additional standards of care will be addressed.

#### **Ensure Systems Are in Place to Support Quality Provision of Care**

For national policy and guidelines to have an impact on healthcare provision, systems that support providers and help them to do their jobs effectively also have to be strengthened. These systems sustain implementation of the guidelines, and in many cases the guidelines help to sustain and strengthen the systems. National- and supervisory-level personnel should not expect standards to be consistently attained if the support systems for healthcare delivery are not constantly addressed. And each of these systems requires guidelines that are consistent with the national goals.

Human resource systems for deployment, retention and motivation of personnel, for example, must be in place so that there are sufficient numbers of the appropriate cadres of healthcare providers to give the high quality care defined by the guidelines. *Training systems* in both the preservice and inservice arenas also must support the implementation of the guidelines. Conversely, implementation of the guidelines is strengthened when personnel are trained and acquire the knowledge and skills they need to provide care that meets the new standards. Similarly, effective *supervision systems* both affect and are affected by implementation of the guidelines. Supervisors play a crucial role in facilitating the use of the guidelines by healthcare providers in their care provision, and the guidelines support supervisors in introducing and gaining acceptance for essential care practices. And systems for *supplies and logistics, referral and monitoring and evaluation* also must be strengthened to support guidelines implementation. The various systems involved and the changes that need to take place are discussed more fully in the next section.

**Motivate Providers  
and Ensure That  
They Have Skills**

When dissemination is complete, healthcare providers should be implementing the guidelines as part of their daily practice. But for this to happen, it is critical that providers be motivated to follow the guidelines and be trained in their use. Changing attitudes and behavior is known to be a difficult and challenging process, but it must be accomplished if healthcare providers' performance is to reflect the standards set out in the guidelines. Having a clear strategy for behavior change from the beginning, and then applying it consistently, is the approach most likely to lead to adherence.

Motivating and supporting providers are key to facilitating their adherence to the guidelines. Motivational programs such as orientation and training activities are designed to help providers achieve complete understanding of what is in the guidelines and how they should be used. This understanding encourages provider ownership—an important aspect of adherence. A sense of ownership gives providers the confidence to problem-solve and adapt guidelines to their needs. Concrete tools and tips that can be used by providers on a day-to-day basis also improve providers' motivation to adhere to the guidelines.

### **Guatemala Uses Assessment Tool to Motivate Healthcare Services to Implement Guidelines**

The MOH in Guatemala worked closely with the MNH Program to operationalize existing national guidelines and global standards by developing assessment tools that contain objective, verifiable criteria as well as incorporate provider perspectives and client needs and expectations. Through a participatory, inclusive process involving the MOH, healthcare institutions and the MNH Program, assessment tools for various technical areas of maternal and newborn healthcare provision were developed that list sentinel quality criteria for each area. Tools specific to each level of the healthcare system—health post, health center, community maternity and district hospital—have been developed. A MOH quality team performs the assessment using the tool, noting when and why particular criteria are not being met. The assessment allows an objective score (e.g., the number of criteria that a healthcare site has successfully met) to be calculated. By looking at the gaps in performance, the team can conduct a cause analysis and determine the appropriate interventions to address those gaps. After the appropriate interventions have been implemented, the assessment tools can again be utilized to determine changes in performance and quality. This assessment has been found to be a motivating force for healthcare providers to improve the quality of care they give, and has become part of the national process of accreditation.

Inservice training courses will almost certainly be needed to equip current providers with the new skills set out in the guidelines. If there is a large number of providers to be trained, or a large number of skills in which they need training, this can be an enormous and costly undertaking. Modern learning methods, focused, competency-based training, distance learning techniques and computer-assisted instruction are ways in which some or all of the new skills can be taught in the most cost-effective manner. A fuller discussion of inservice training is found in the next section.

### **East and Southern Africa Develops Regional Trainers to Ensure Implementation of Guidelines**

To address the need for clinical experts in maternal and newborn healthcare, the MNH Program is developing a core group of faculty and trainers in three regions—Africa, Asia and Latin America. East and Southern Africa is the first region where activities under this initiative have taken place. Beginning in Uganda in October 2000, 22 midwife and physician clinicians from seven African countries were updated in evidence-based maternal and newborn healthcare practices and participated in clinical skills standardization.

The clinical portion of the training program is based on two of the international resource documents recently developed by WHO and JHPIEGO: *Managing Complications in Pregnancy and Childbirth* and *Basic Maternal and Newborn Care*. Topics addressed included antenatal care, including birth preparedness and complication readiness; malaria and anemia; hypertensive disorders; bleeding; nutrition and micronutrients; HIV; care during labor, delivery and the immediate postpartum; infection prevention; unsatisfactory progress in labor; rapid assessment and management of shock; care of the normal newborn, managing low birth weight and sick newborns; and improving provider performance and the quality of maternal and neonatal care. Training was conducted using prototypic presentation materials that are based on the best practices and the latest evidence and research in the field of maternal and neonatal healthcare.

The training process extends over a 12- to 18-month period, and includes a knowledge update, clinical skills standardization and training in clinical training skills, as well as a practicum. On completion of their training, participants will be able to serve as technical experts and pre- and inservice training resources for organizations and institutions throughout the African Region working to improve the quality of maternal and newborn healthcare services.

**Ensure Involvement  
of the Community**

Both healthcare providers and clients must work together to make sure that standards of care are met. Community members and leaders have a vital role to play, both in developing and implementing guidelines, as part of their greater responsibilities to ensure and support healthcare.

Representative community leaders generally sit on safe motherhood committees and participate actively in the development of guidelines, particularly policy guidelines. It is important for communities to be involved in the guidelines development so that they can represent to the ministry of health the perceived needs of their respective communities. Unless these perceived needs are addressed in the adaptation of national guidelines, the community is unlikely to embrace all the services to be provided.

Communities also need to be involved in the implementation of the guidelines. A vital part of the implementation process is to inform community members about when, where and how to access maternal and neonatal healthcare services. Women, their families and their communities need to develop new, higher expectations of what they have a right to receive from healthcare providers. In their action plans, therefore, implementers will need to include information, education and communication activities about services available to the communities they serve. These might include workshops, role plays, radio messages, newspaper articles, fliers, posters and other community-oriented activities. Providers, for their part, need to know methods of behavior change communication to improve their capacity to deliver appropriate messages and motivate communities. In this way, both providers and clients work together to ensure that standards of care are respected.

With health sector reform taking place in many countries, the community is becoming more actively engaged in the management of health facilities. Committees made up of both healthcare staff and community members are frequently used to develop strategies for putting guidelines into practice. This collaboration furthers acceptance by:

- giving the facility staff the opportunity to understand the community's perspective,
- giving the community the opportunity to understand constraints, and
- promoting community responsibility and support for the facility and its own health.

Community members involved in guiding or managing health facilities need to be made fully aware of the changes involved in improving the quality of maternal and neonatal healthcare services. Those members of the community with direct managerial responsibility should also know

what concrete changes will have to take place within the facility (infrastructure, equipment, supplies, logistics, etc.) to implement the guidelines effectively.

It may not be possible to implement some parts of the guidelines at the healthcare service level alone. The healthcare system, for example, may not be capable of ensuring transport of a woman with complications to a primary healthcare facility or to a referral center. Communities, if appropriately mobilized, can take on this responsibility, either ensuring the transport itself, or creating a revolving community fund to pay for transport when it is required.

Communities are also increasingly included in monitoring and evaluating healthcare services. In many communities, community members themselves take the lead in assessing client satisfaction with services delivered. The results of their assessment are then fed back through the system, so that healthcare providers can adjust services to make them more client-friendly.

# **STRENGTHENING SUPPORTING SYSTEMS TO ENSURE GUIDELINES IMPLEMENTATION**

## **Human Resources Systems**

Human resources are a critical factor in implementing national guidelines. Even the best guidelines cannot have the optimal effect if there are insufficient numbers of providers delivering maternal and neonatal health services, or if well-trained providers are leaving the service at rates faster than they can be replaced. Governments need plans for development of human resources that incorporate effective recruitment and deployment of personnel to meet the community's needs. Clearly defined job descriptions are an essential component of a human resources system, and in a system in which national policy guidelines have been appropriately implemented, these job descriptions are created using input from the guidelines. Job descriptions, based on the skills and standards described in the guidelines, then find further use in the development of preservice education and inservice training programs.

Governments also must address issues of retention, motivation and morale so that all cadres of healthcare providers are supported in their work. Low employee motivation and morale often are identified as issues in inadequate provider performance, and can have an adverse effect on the successful implementation of guidelines. Mechanisms need to be in place to recognize the efforts of staff to provide high quality care and to reinforce practices that institutionalize positive behavior change. Professional growth and continuing education opportunities have to be developed.

## **Training Systems**

The desired result of any clinical training program, whether preservice or inservice, is that providers begin using newly acquired skills to improve patient care. When guidelines are used in the development of these training programs, the skills included in the training are carefully selected as key skills called for in the guidelines and needed to improve provider performance. This allows the training to be very focused and thus makes the most efficient use of time required for training.

A training system that supports the implementation of guidelines is the result of an integrated training strategy—a strategy that addresses all sectors, cadres and levels of the healthcare system. This integrated approach helps achieve standardization and increase collaboration. In addition, it fosters a focus on clients and the services they need rather than on the category of provider or level of the healthcare system.

**Preservice  
Education**

National training systems now recognize that the most sustainable training approach in the long term is preservice medical, midwifery and nursing education. When service delivery guidelines are used to develop preservice curricula, students learn from the start of their careers the basic principles of guidelines-based clinical practice and are taught how to apply them. As the new guidelines become the norm for providing patient care, performing procedures, following drug and supply standards and educating the public about warning signs, newly graduating students practice them accordingly. This result would be much more difficult, if not impossible, to achieve if medical, midwifery and nursing curricula developed without reference to the guidelines.

In many countries, preservice education still concentrates on acquisition of knowledge, while failing to provide students with the skills that they need to perform their jobs proficiently. When guidelines are used to develop preservice education programs, curricula are refocused to include competency-based clinical skills training, so that students graduate as qualified, proficient professionals and are able to provide the quality of care defined by the guidelines.

**Inservice Training**

Even though a shift to preservice training is the necessary long-term solution, inservice training must still take place. Most healthcare professionals now in service were not trained using a guidelines-based curriculum. And the guidelines will be revised in the future, requiring providers to learn more new skills. Inservice training is therefore necessary in the short term to bring the skill level of existing health personnel up to the standards set by guidelines. In this case, inservice is need-based training, conducted to fill an identified gap in healthcare providers' knowledge or skills. As in preservice curricula, inservice training programs are developed based on clearly defined job descriptions which, in turn, have been developed based on the guidelines.

**Supervision Systems**

Supervision is recognized as an essential element in the improvement of provider performance. In many countries, however, supervisory systems based on external interventions (coming from outside the health facility) are often weak due to the lack of resources required to implement a regular supervisory schedule. Therefore, alternative supervisory schemes based on internal interventions (within the healthcare facility) are proposed in an effort to strengthen supervision. Tools for self-assessment, the COPE (client-oriented, provider-efficient) approach developed by AVSC International (now EngenderHealth), or the manual on clinical supervision developed by JHPIEGO can help support providers in changing behaviors and improving performance in line with national guidelines. When new guidelines are introduced, it is often the responsibility of the clinical supervisor at the healthcare delivery site to

ensure that the staff and facility follow them. Internal supervisory interventions based on guidelines also help staff monitor their own performance and address problems as they arise.

Case reviews of maternal deaths are internal supervision mechanisms used in facilities to indicate whether all parts of a service are functioning correctly. Review of the maternal deaths and “near misses”<sup>3</sup> at an institution can illustrate why some women die and others are saved. Analysis of the maternal near misses acknowledges the staff’s effort to avert maternal mortality and fosters a sense of pride in this effort. Recognition should be given to staff members who demonstrate good problem-solving skills and good case management. This positive feedback motivates staff to do their best and encourages them to follow the guidelines in providing healthcare services.

To be effective, supervision must be linked to training. Both training and supervision can be considered “tools” for fostering the implementation of guidelines and attaining improved healthcare. And training of supervisors is as important as training of healthcare providers. In addition to clinical skills, supervisors need training in management, mentoring, coaching and other interpersonal skills.

Once training is complete, the provider needs appropriate support from a supervisor and clinical peers to work toward the desired level of service embodied by the guidelines. New skills brought into the work environment may be contrary to what has been done routinely. For example, introduction of the practice of active management of third stage of labor may create professional dissonance. While active management of third stage has been shown to prevent postpartum hemorrhage and reduce blood loss after birth, many providers have practiced physiologic management of third stage all of their professional lives, waiting for the placenta to separate on its own. Introducing active management may meet intense resistance on the part of these providers who may see no reason to change. Supervisors can use the guidelines to support the introduction of this essential practice and coach providers to improve their skills.

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<sup>3</sup> A “near miss” is a life-threatening complication that could have resulted in a death if all systems had not responded to the emergency adequately.

### **Introduction of the PROQUALI Model in Brazil Facilitates the Implementation of Guidelines**

PROQUALI, a performance and quality improvement model implemented in the states of Ceará and Bahia, Brazil, supports implementation of national guidelines. PROQUALI is essentially a system to “accredit” health centers that meet a pre-established, standardized set of quality criteria for delivery of selected reproductive health services. In the PROQUALI model, an external assessment tool, which incorporates provider perspectives and clients needs and expectations, is used to: 1) identify the basic functions and services of the reproductive health system based on national, regional and local policies and priorities; and 2) determine key standards and indicators based on norms, protocols and/or service delivery guidelines. The PROQUALI model requires that standards be translated into specific actions, that these actions be organized around processes that occur at the facility level, and that all processes necessary for the provision of quality services be included.

Implementation of the PROQUALI model has demonstrated that these operationalized standards:

- highlight the importance of having norms and protocols and show their usefulness
- facilitate supervision that is interactive, focused, objective and efficient
- facilitate decision-making for problem solving
- empower providers and supervisors
- facilitate transfer of training
- strengthen the regulatory role of different levels of government
- provide tools for local advocacy and resource mobilization
- facilitate information and empowerment of clients and communities to demand and participate in the provision of quality services

## **Supply Systems, Logistics, Drugs and Equipment**

It is not unusual to hear that women have died because supplies and equipment to stabilize them or treat their complications were not available. Implementing guidelines requires that specific supplies, drugs and equipment be available to the provider. For example, if health centers and hospitals do not regularly stock magnesium sulfate in the pharmacy, providers cannot manage eclampsia most effectively. When guidelines are fully implemented, a committee or division of the ministry of health responsible for performance improvement or improved quality of care will ensure that the essential supplies and materials necessary to implement the standards of care are part of the essential drug list for the country, and that managers know how to order these supplies. WHO has developed a standard list of essential drugs for antepartum, intrapartum and postpartum care. Many countries have used this list as a starting point in deciding what supplies, equipment and drugs are necessary to implement their guidelines.

## **Referral Systems**

Effective referral and transport systems must be in place so that the high quality care required by the guidelines can be achieved. Virtually all countries' standards require that every woman have access to a continuum of care during pregnancy, childbirth and the postpartum period in order to reduce both maternal and neonatal mortality. This

continuum of care starts in the home and community and does not end until the woman receives the definitive care she needs, often in a healthcare facility. It means that appropriate care is provided not only at home and within facilities but also between facilities during occasions of referral. Each link in the continuum of care chain has to operate efficiently and effectively to provide high quality care in order to ensure that women and neonates do not arrive at a health facility in such poor condition that their chance of survival is greatly reduced.

Effective referral and transport are required to save lives. Both health facilities and the community need to be ready. Each facility should have a clinical emergency action plan. Whether or not it has its own transport system, the facility should know how to access emergency transport to receive patients or to transfer them to the next higher level of care. The guidelines should assist providers in determining when to move a woman to the next level of care and how to stabilize her and ensure continuity of care until she reaches that level. Basic emergency supplies also must be readily available at each level of care.

Since many, if not most, births occur outside the healthcare facility, the community is usually the initiator of care. Members of the community need to recognize early danger signs and have an emergency readiness plan in the event of complications. This will include ensuring access to a means of transport on an urgent basis as well as to the funds to pay for it.

## **Monitoring and Evaluation Systems**

The ultimate goal of implementing guidelines for maternal and neonatal care is the reduction of maternal and neonatal mortality. It would seem logical, therefore, that monitoring changes in maternal mortality would demonstrate whether or not guidelines have been implemented effectively. Lessons learned from the first decade of the Safe Motherhood Initiative, however, have shown that it is not that simple. Practical methods do not currently exist for measuring small changes in maternal mortality over relatively short (5 to 7 years) periods of time. Routine data sources are often incomplete. Survey-based estimates of maternal mortality are very expensive to perform, may be highly imprecise and do not usually permit trend analysis. For this reason, international agencies now recommend monitoring of process indicators. Process indicators are those indicators that reflect changes in the processes that determine the ultimate maternal/neonatal outcome. Several United Nations agencies (WHO, UNICEF, UNFPA) have developed a set of process indicators for monitoring the availability and use of obstetric services. (There is no evidence yet, however, that process indicators actually point to maternal mortality results.)

In addition to systems for monitoring and evaluating maternal mortality and quality of care, methods for directly monitoring the implementation of guidelines are also essential. The Attachment at the end of this paper shows certain indicators that are appropriate for monitoring guidelines implementation. Routine reporting on the coverage of essential obstetric care, facility-based quality of care indicators and indicators of compliance with standards have been found to be useful for monitoring and evaluating implementation of guidelines. Once a country has selected the indicators that most accurately demonstrate implementation of its guidelines, planners and providers develop a plan for data collection to routinely and accurately generate information on these indicators. Each facility or district then becomes capable of analyzing and interpreting its own data and plans for timely feedback to concerned staff about how implementation of the guidelines is progressing. Data can be collected to assess the impact of guidelines implementation at three levels: in each facility, across all facilities and in the country's population as a whole. The purpose of collecting a variety of data is to generate a minimum number of indicators that will reflect dissemination and actual implementation of guidelines for maternal and neonatal healthcare.

## **CONCLUSION**

This paper has demonstrated the need for standards of care to be applied throughout a country's health system to ensure the provision of high quality maternal and neonatal healthcare. These standards can be communicated to healthcare providers through the process of development and implementation of policy and service delivery guidelines. To guarantee that a nation's healthcare standards are state-of-the-art, international resource materials are available for use in the process of developing national guidelines to provide the evidence basis for the standards. These international materials can form the foundation of both policy and service delivery guidelines.

Development and implementation of guidelines must be tailored to suit each individual country's needs. The many steps involved in developing guidelines and then implementing them at the healthcare provider level can occur in a different sequence in each country. What is essential, however, is that a solid plan be devised to ensure that all healthcare providers who need the guidelines receive them, know how to provide services according to the standards set out in them and are convinced of the need to do so. Additionally, guidelines will only be implemented fully when a country's policies support them, the necessary infrastructure and resources are present, effective healthcare delivery systems are in place, and communities, as well as providers, have embraced them. When these elements are present, service delivery guidelines for maternal and neonatal healthcare will play a crucial role in improving the health of women and their newborns.

## ATTACHMENT

LEVEL OF DATA COLLECTION	PURPOSE	PROPOSED INDICATORS
Regional or national (more than one facility)	These indicators are proposed to reflect <i>coverage</i> of services at a national or subnational level	% of health facilities at which staff routinely practice active management of the third stage of labor <b>or</b> selected other skills and procedures highlighted in the standards of care
Individual facility	These indicators are proposed to reflect <i>quality of care</i> provided at specific facilities	% of cases of hemorrhage (or other selected conditions) managed according to standards of care
		Case fatality rates*: only recommended in large hospitals with a substantial number of maternal deaths
		Time interval between admission and treatment for obstetric emergencies*
Population-based	These indicators are proposed to reflect <i>service utilization</i>	% of births assisted by a skilled attendant
		Caesarian section rates
		% of births for which women receive postnatal care
		% of births for which women receive at least one (or four) antenatal care visits

\* *Sources:* Guidelines for Monitoring the Availability and Use of Obstetric Services, UNICEF, WHO and UNFPA, 1997.

## APPENDIX A: WORKSHOP PARTICIPANTS

**Koky Agarwal**

The Futures Group International  
Washington, DC

**Robert Ainsley**

Johns Hopkins Center for  
Communication Programs  
Baltimore, Maryland

**Adrienne Allison**

JHPIEGO Corporation/MNH Program  
Baltimore, Maryland

**Patsy Bailey**

Family Health International  
Research Triangle Park, North Carolina

**Abdul Bari Saifuddin \***

University of Indonesia  
Jakarta, Indonesia

**Robert Black**

Johns Hopkins University  
Baltimore, Maryland

**Silvia Bomfim Hyppólito \***

Ceará Federal University  
Ceará, Brazil

**Sue Brechin**

JHPIEGO Corporation  
Baltimore, Maryland

**Fredrik Broekhuizen**

University of Wisconsin  
Milwaukee, Wisconsin

**Jean-Robert Brutus \***

Institut Haïtien de Santé Communautaire  
Port-au-Prince, Haiti

**Alain Damiba**

JHPIEGO Corporation  
Baltimore, Maryland

**Marilen Danguilan**

United Nations Children's Fund  
New York, New York

**Anderson Doh**

University of Yaoundé  
Yaoundé, Cameroon

**Susheela Engelbrecht**

JHPIEGO Corporation/MNH Program  
Baltimore, Maryland

**Alberto de la Galvez Murillo**

JHPIEGO Corporation/MNH Program  
La Paz, Bolivia

**Zafarullah Gill**

Columbia University  
New York, New York

**Tina Gryboski**

Program for Appropriate Technology in  
Health/MNH Program  
Washington, DC

**Richard Guidotti**

World Health Organization  
Geneva, Switzerland

**Petra Hoope-Bender**

International Confederation of Midwives  
The Hague, Netherlands

**Linda Ippolito**

INTRAH  
Chapel Hill, North Carolina

**Monir Islam**

World Health Organization  
Geneva, Switzerland

**Kathy Jesencky**

JHPIEGO Corporation/MNH Program  
Baltimore, Maryland

\* = member, JHPIEGO Board of Trustees

**Robert Johnson**

JHPIEGO Corporation/MNH Program  
Baltimore, Maryland

**Barbara Jones**

JHPIEGO Corporation  
Baltimore, Maryland

**Jeff Jordan**

The Futures Group International  
Washington, DC

**Barbara Kinzie**

JHPIEGO Corporation/MNH Program  
Baltimore, Maryland

**Mary Kroeger**

Academy for Educational Development  
Washington, DC

**Joy Lawn**

Centers for Disease Control and Prevention  
Atlanta, Georgia

**Robert Leke \***

University of Yaoundé  
Yaoundé, Cameroon

**Valentino Lema**

University of Malawi  
Blantyre, Malawi

**Jerker Liljestrand**

World Bank  
Washington, DC

**Kobchitt Limpaphayom \***

Chulalongkorn Hospital  
Bangkok, Thailand

**Enriquito Lu**

JHPIEGO Corporation  
Baltimore, Maryland

**Patricia MacDonald**

JHPIEGO Corporation/MNH Program  
Jakarta, Indonesia

**Jennifer Macias**

JHPIEGO Corporation  
Baltimore, Maryland

**Ron Magarick**

JHPIEGO Corporation  
Baltimore, Maryland

**Peg Marshall**

Centre for Development and Population  
Activities  
Washington, DC

**Noel McIntosh**

JHPIEGO Corporation  
Baltimore, Maryland

**Alice Merritt**

Johns Hopkins University Center for  
Communication Programs  
Baltimore, Maryland

**Judith Moore**

Save the Children  
Washington, DC

**Indira Narayanan**

BASICS  
Arlington, Virginia

**Edgar Necochea**

JHPIEGO Corporation  
Baltimore, Maryland

**Emmanuel Otolorin**

JHPIEGO Corporation  
Kampala, Uganda

**Lydia Palaypay \***

Far Eastern University  
Manila, Philippines

**Anjou Parekh**

JHPIEGO Corporation/MNH Program  
Baltimore, Maryland

**Glenn Post**

United States Agency for International  
Development  
Washington, DC

**Zahida Qureshi**

University of Nairobi  
Nairobi, Kenya

**Scott Radloff**

United States Agency for International  
Development  
Washington, DC

**Amy Rial**

JHPIEGO Corporation  
Baltimore, Maryland

**Jeanne Rideout**

JHPIEGO Corporation  
Baltimore, Maryland

**Joy Riggs-Perla**

United States Agency for International  
Development  
Washington, DC

**Harshad Sanghvi**

JHPIEGO Corporation/MNH Program  
Baltimore, Maryland

**Lois Schaefer**

JHPIEGO Corporation  
Baltimore, Maryland

**Jeffrey Smith**

JHPIEGO Corporation  
Baltimore, Maryland

**Cindy Stanton**

JHPIEGO Corporation/MNH Program  
Baltimore, Maryland

**Mary Ellen Stanton**

United States Agency for International  
Development  
Washington, DC

**Patricia Stephenson**

United States Agency for International  
Development  
Washington, DC

**Anne Tinker**

Save the Children  
Washington, DC

**Donna Vivio**

American College of Nurse-Midwives  
Washington, DC

**Wendy Voet**

JHPIEGO Corporation  
Baltimore, Maryland

**Christiane Welffens-Ekra \***

University of Abidjan  
Abidjan, Côte d'Ivoire

**Jelka Zupan**

World Health Organization  
Geneva, Switzerland



## APPENDIX B: WORKSHOP AGENDA

### Wednesday, 13 September 2000

- 8:00 a.m. Registration
- 8:30 a.m. Welcome  
*Noel McIntosh, JHPIEGO*  
*Monir Islam, World Health Organization*  
*Adrienne Allison, JHPIEGO Corporation/MNH Program*
- 9:00 a.m. Introduction, workshop objectives, expectations, review of program  
*Robert Johnson, JHPIEGO Corporation/MNH Program*
- 9:30 a.m. Keynote Address  
**We can't do it alone: Necessity of collaboration and pooling resources to ensure quality maternal and neonatal healthcare**  
*Joy Riggs-Perla, United States Agency for International Development*
- 10:00 a.m. **Improving provider performance and quality of care: The importance of standards of care and reference materials**  
*Jerker Liljestrand, World Bank*
- 10:30 a.m. Break
- 10:45 a.m. **Basic Care in Pregnancy and Childbirth (BCPC): The importance of normal birth**  
*Susheela Engelbrecht, JHPIEGO Corporation/MNH Program*
- 11:30 a.m. **Managing Complications in Pregnancy and Childbirth (MCPC): Programmatic implications**  
*Harshad Sanghvi, JHPIEGO Corporation/MNH Program*
- 12:15 p.m. Lunch
- 1:15 p.m. **WHO's approach to changing policy and practice: Dissemination, Adaptation and Utilization (DAU) process**  
*Monir Islam, World Health Organization*
- 2:00 p.m. Country Study: Nepal  
**Policy implications for implementing essential maternal and neonatal health standards of care**  
*Jeanne Rideout, JHPIEGO Corporation*  
*Jeffrey Smith, JHPIEGO Corporation*

- 2:30 p.m. Country Study: Uganda  
**Approaches for adapting and utilizing healthcare standards to improve service delivery**  
*Emmanuel Otolorin, JHPIEGO Corporation*  
*Zahida Qureshi, University of Nairobi*
- 3:00 p.m. Break
- 3:30 p.m. Country Study: Indonesia  
**Using standardized materials in training and supervision**  
*Patricia MacDonald, JHPIEGO Corporation/MNH Program*  
*Harshad Sanghvi, JHPIEGO Corporation/MNH Program*
- 4:00 p.m. **PROQUALI: A quality improvement methodology for health services**  
*Robert Ainsley, Johns Hopkins University Center for Communication Programs*  
*Edgar Necochea, JHPIEGO Corporation*
- 4:30 p.m. Highlights of Day One
- 4:45 p.m. Group photo
- 5:00 p.m. Reception at the Admiral Fell Inn

**Thursday, 14 September 2000**

- 8:30 a.m. Overview of Day Two  
*Monir Islam, World Health Organization*
- 8:45 a.m. **Implementing global maternal and neonatal health standards of care: Strategy for change**  
*Barbara Kinzie, JHPIEGO Corporation/MNH Program*
- 9:30 a.m. Small group assignments  
*Robert Johnson, JHPIEGO Corporation/MNH Program*
- 10:00 a.m. Break
- 10:30 a.m. Small group work
- 12:30 p.m. Lunch
- 1:30 p.m. Small group work presentations and discussion
- 2:30 p.m. Recommendations
- 3:00 p.m. Closing  
*Monir Islam, World Health Organization*  
*Adrienne Allison, JHPIEGO Corporation/MNH Program*

For more information about this report, contact:

Maternal and Neonatal Health Program  
JHPIEGO Corporation  
1615 Thames Street  
Baltimore, Maryland 21231-3492, USA  
Telephone: 410-614-2288  
Fax: 410-614-6643  
Internet e-mail: [mnh@jhpiego.org](mailto:mnh@jhpiego.org)

To order additional copies of this publication, contact:

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Fax: 410-614-3915  
Internet e-mail: [orders@jhpiego.org](mailto:orders@jhpiego.org)

